

AGET 360 Course Syllabus

Course Description: Field practices of irrigation. Evapotranspiration, soil/moisture relationships, water measurement, pumps, wells, drainage, and sprinkler, drip, and surface systems. 2.0 hours lecture, 3.0 hours laboratory. *Prerequisites: PSSC 002 or PSSC 050*

Instructor: Michael Spiess

Office Hours and Contact Information: Monday and Wednesday 0900-1100, 12:00-12:30, in Plumas 213,

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Web site: <http://www.agedweb.org>
Phone: 898-4554.

Class Meeting: Monday and Wednesday 1100-1150, Lab Wednesday 1400-1650 in Shop II.

Course Objectives: Students will:

- Have an understanding of basic plant-water-soil relationships used in irrigation scheduling
- Understand the factors effecting crop water use and how to schedule irrigations.
- Have an understanding of the common types of irrigation systems and how they function.
- Demonstrate the ability to apply knowledge of irrigation systems to evaluate irrigation systems.
- Be able to correctly identify common tools, equipment, and materials used in the irrigation

Required Texts: Irrigation, 5th Edition, 1983, The Irrigation Association

Required Equipment: Calculator (lecture and lab), NOT a cell phone.

Web Site and Computer Use:

Computers are an integral part of the irrigation industry and students are expected to use this technology as part of the course. Some materials for this course are found on the course web site delivered by WebCT. These materials are an integral part of the course and students will be expected to review it regularly. Written assignments are expected to be typed. Generally, assignments will be provided in MS-Word format allowing the student to print and edit the document. Students not familiar with computers or use of the Web (or WebCT) are strongly encouraged to seek training (see instructor for further information). Computer portions of this course can be completed on a home computer with an internet connection or in a campus computer lab (see <http://www.csuchico.edu/stcp/labs/>). Information on other computer resources for students is available at: <http://www.csuchico.edu/stcp/>

On the web site students will find:

- Lecture Notes (PDF or PPT) provided as a study aid only.
- Lab Exercises
- Grades (generally posted after the 4th week)
- Assignments
- A current course activity schedule
- Other resources and required reading.
- Calendar (due dates)

Course Management:

- Students are strongly advised not to miss labs since this time may be difficult or impossible to make up.
- No makeup's will be allowed unless by prior permission of the instructor.

- No written assignments will be accepted after the last lecture meeting. Late assignments are subject to a 20% penalty.
- Tests will be a combination of multiple choice, short answer, and problems.
- Lab reports are due in the following lab period, late labs will not be accepted. .
- Student grades will be posted on the Instructor's web site and it is the responsibility of the student to check their grade for accuracy. If a student feels an error in grading has been made, the student has one week from the time of the assignment is returned to them (or the grade is posted on the web, whichever is later) to request a review of the grade. The request must be in writing – attached to the original assignment—and must include a specific statement as to what is in error, how it should be corrected, and what supporting evidence is available. It is highly recommend that students keep copies of assignments.
- It is the student's responsibility to meet all appropriate deadlines for adding, withdrawing, etc. These deadlines can be found on the University web site at:
<http://www.csuchico.edu/schedule/>
- Use of tobacco products is not allowed during class.
- Students are expected to turn off all pagers, cell phones and other electronic devices during class time.
- Students are expected to pay attention and participate in class meetings.
- All class participants are expected to exhibit respectful behavior to other students and the instructor.
- All students have the right and privilege to learn in the class, free from harassment and disruption.
- Inappropriate or disruptive behavior will not be tolerated, nor will lewd or foul language.
- The class follows the standards set in the **Code of Students Rights and Responsibilities (EM 96-38)** and students are subject to disciplinary action for violation of that code.

Grading:

Grades will be determined by:

	Approximate Points
Written assignments	100-200
Midterm (2)	200
1 final exam (comprehensive)	150
Lab exercises (15 x 50)	750

Grades will be assigned using the following scale:

94% - 100%	A
90% - 93%	A-
87% - 89%	B+
83% - 86%	B
80% - 82%	B-
77% - 79%	C+
73% - 76%	C
70% - 72%	C-
67% - 69%	D+
60% - 66%	D
Below 60%	Failure

University Policies

University policies will be enforced in the course (see Catalog).

Cheating and Plagiarism: Cheating and plagiarism are considered as the most serious offenses in the teaching-learning process, as it erodes the integrity of the student/faculty relationship. Students are reminded that the University Policy on Academic Honesty will be enforced in this class. The policy is available in the Catalog. *Students are reminded that turning in someone else's homework or project is considered cheating.* If there is evidence that you have been involved in any form of academic dishonesty, you will receive an "F" grade for the course, be locked from WebCT, and a report will be provided to Student Judicial Affairs for further action.

Students with Disabilities: Upon identifying themselves to the instructor and the university, students with disabilities will receive reasonable accommodation for learning and evaluation. (Contact Disability Support Services)

Academic Rigor

Academic rigor means the consistent expectation of excellence and the aspiration to significant achievement. It should pervade the entire atmosphere of the University--teaching and learning, curriculum, evaluation of student and faculty, outreach, admissions, advising, and student life.

Rigorous Learning

Rigorous students are part of the equation of rigorous teaching and learning. A rigorous education is vigorous, difficult, deeply satisfying work, and it requires a lifestyle conducive to achieving excellence. College is not a temporary diversion or a period of entertainment, but a fundamental piece of student character, citizenship, and employment future. A diploma and good grades from a demanding institution count for something. Rigorous students

- Set high personal standards, develop a strong sense of purpose, come to class well-prepared, and complete assignments on time.
- Develop an effective relationship with the instructor, in and outside of class, and make the most of University advising and other services.
- Treat fellow students and the classroom environment with complete respect. Give each class full attention and participation. Do not miss class, arrive late, or leave early.
- Accept continuing responsibility for learning and for grades earned.
- Approach each class in a professional manner, as if the class were real employment. Treat a full-course load as full-time work and spend no less time on it. Determine exactly what is expected.
- Experiment with all teaching and learning strategies used in classes, and also determine which work best for them.
- Demonstrate complete honesty and integrity.

Rigorous Teaching

Rigorous faculty are role models for the behaviors and accomplishments the University seeks to promote. They demonstrate a high level of professionalism and commitment to the University and to their discipline and inspire in students an excitement about learning. Guiding students toward excellence, they

- Communicate high expectations and demonstrate them through a demanding syllabus and well-prepared classes.
- Encourage student-faculty contact in and out of class and offer conscientious advising and consistent availability.
- Encourage collaboration and active learning, fully involving students in the learning experience.
- Provide students early, prompt, and frequent feedback and develop appropriate assessment strategies.
- Emphasize time on task, clearly communicate time required for learning, make it clear that full-time study is full-time work, and design learning experiences so that homework matters.

- Develop approaches and strategies geared to diverse talents and ways of learning, while maintaining high standards of accountability.
- Reduce opportunities to engage in academic dishonesty and challenge its occurrence.

Course Schedule

Week Of	Topic	Reading*	Assignments	Lab
1/22/2007	Overview of Irrigated Agriculture in California, Introduction to System Design	Chap 1 & 2		Farm Tour of Irrigation
1/29/2007	Hydraulics	Chap. 8	Pipe Selection	Hydraulics
2/5/2007	System Uniformity	Chap. 7		Sprinkler Pattern Analysis / Design Lab
2/12/2007	Pumps and Wells	Chap. 9	Pump Selection	Design Lab (continued)
2/19/2007	Midterm / Water Budget Scheduling	Chap. 4 & 5		Field Trip
2/26/2007	Water Budget Scheduling		Irrigation Schedule	Landscape Water Supplies
3/5/2007	Irrigation Scheduling			Pump Test / Wells
3/12/2007	Water Measurement	Chap 3		Water Measurement
3/19/2007	Spring Break			Spring Break
3/26/2007	Salinity & Frost Control	Chap. 6 & 13		O.H. Design Data Collection
4/2/2007	Midterm / Outlet Selection	Chap 10 & 11 & 20	Design	Surveying for Irrigation
4/9/2007	Lateral/Main Design	Chap. 19	Outlet Selection	Field Trip
4/16/2007	Design / Installation	Chap 16		Controllers
4/23/2007	Control Systems and System Management	Chap. 17		(Installation)
4/30/2007	Auditing	Chap. 22		Surface Irrigation
5/7/2007	Economic, energy, and hydraulic evaluation of irrigation systems			Sprinkler Audit
5/16/2005	Final Exam Monday 12-1:50			

*Complete before first lecture of the assigned week.

Course Schedule: The course schedule is subject to change. Changes will be announced in class and posted on the course web site.